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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/506,084 | 02/17/2000 | Toshikazu Ohshima | 2355.11106 | 7474 |

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EXAMINER

HARRISON, JESSICA

ART UNIT PAPER NUMBER

3714

DATE MAILED: 12/05/2003

21

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/506,084

Applicant(s)

OHSHIMA ET AL.

Examiner

Jessica J. Harrison

Art Unit

3714

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 29 October 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4, 8-10, 18-23, 27-29 and 37-39 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 8-10, 18-23, 27-29 and 37-39 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

DETAILED ACTION

Continued Prosecution Application

The request filed on 10/29/2003 for a Continued Prosecution Application (CPA) under 37 CFR 1.53(d) based on parent Application No. 09/506084 is acceptable and a CPA has been established. An action on the CPA follows.

Applicant's amendment of October 29, 2003 is acknowledged. Claims 1-4, 8-10, 18-23, 27-29 and 37-39 remain pending. Claims 1 and 39 have been amended. Claims 5-7, 11-17, 24-26 and 30-36 have been previously cancelled.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4, 8-10, 18-23, 27-29 and 37-39 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Jarvik.

The rejection of the prior office action is maintained and repeated hereinbelow. The Jarvik system integrates virtual reality with real-time sensed physical reality to provide a unique hybrid environment, as claimed in the instant claims. Regarding the limitation of "an inputting unit adapted to input a real space image corresponding to a location/posture of a viewpoint of the operator", note Jarvik at 11:35-55 and camera 148. Applicant's prior amendments to claims 1, 20 and 39 merely rephrased the functionality of the computational unit and deleted the recognition unit while the amendments to claims 8 and 27 enhanced claim clarity. Regarding applicant's current amendment to claims 1 and 39 related to said rules controlling the action of the virtual object(s) on the basis of an objective and a relative relationship between the virtual object(s) and the real object(s), note Figure 10, steps 91 and 93 at least, as further explained hereinbelow in the response to argument section.

Response to Arguments

Applicant's arguments filed October 29, 2003 have been fully considered but they are not persuasive.

Applicant submits that Jarvik "is not understood" to disclose or suggest the computation unit adapted to determine the next action of virtual objects by referring to a rule memory based on a relation among the location/posture of a viewpoint of the operator, location(s) of the virtual object(s) and geometric information of real objects as set forth in claim 20. Further, applicant argues

that Jarvik fails to disclose the rules control the action of the virtual objects on the basis of an objective (presumably an objective of the game, as disclosed and not a new(matter) objective relationship) and a relative relationship between the virtual object and the real objects as now required by claims 1 and 39.

Applicant should note Jarvik Figure 10 and corresponding discussion. Jarvik's computational unit is equivalent to that claimed. In these steps, at least the rules of physics are employed to compute where the virtual object would appear in .03 seconds, were that object real. Then the object is displayed, superimposed with the real object(s) (position of the handle) in step 115. The data sensed from the real objects (handle – step 89) are used in this calculation. These steps clearly anticipate the now claimed “determining the next action of the virtual object(s) by referring to said rule memory...wherein said rules control the action of the virtual object(s) on the basis of an objective and a relative relationship between the virtual object(s) and the real object(s). It is not seen how they are “not understood” to clearly anticipate. As applicant offers no other interpretation or explanation as to any deficiencies of the prior art, applicant's statement that the prior art is not understood to anticipate is not understood and not persuasive.

Conclusion

This is a Continued Examination (RCE) of applicant's earlier Application No. 09/506084. All claims are drawn to the same invention claimed in the

earlier application and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the earlier application. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action in this case. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no, however, event will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jessica J. Harrison whose telephone number is 703-308-2217. The examiner can normally be reached on 8 hour/M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Hughes can be reached on 703-308-1806. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9302.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0858.

A handwritten signature in black ink, appearing to read 'Jessica J. Harrison', with a long horizontal flourish extending to the right.

Jessica J. Harrison
Primary Examiner
Art Unit 3714

jjh